WHY A CHILDREN ENVIRONMENTAL HEALTH? DIFFERENCES IN CHILDREN'S VULNERABILITY TO POLLUTION AND SANITATION.

Raphael Mendonça Guimarães, Federal University of Rio de Janeiro, Brazil Isabel de Fátima Alvim Braga, Federal University of Rio de Janeiro, Brazil Carmen Ildes Rodrigues Fróes Asmus, Federal University of Rio de Janeiro, Brazil Maíra Mazoto, Federal University of Rio de Janeiro, Brazil Juliana Chrisman, Institute of Studies in Public Health, Brazil

Background and Aims: To discuss the differential susceptibility of children to environmental exposures, as illustrated in the environmental impact on mortality rates for children and adults for infectious respiratory and gastrointestinal problems

Materials and Methods: We conducted an ecological study of time series from the trend of the mortality rate and proportional mortality rate from acute respiratory infections and acute diarrheal diseases and, respectively, the consumption of chlorofluorocarbons - CFCs (air pollutant) and coverage of sewage services in Brazil. We used the polynomial regression model for assessment of trends, which were compared according to age categories with air pollution or water pollution proxy (coverage of exhaustion).

Results: The consumption of CFCs was proportional mortality due to respiratory acute infection and, similarly, it is observed that the higher the percentage of coverage, the lower the mortality rate. This relationship becomes more acute in children than in adults.

Conclusion: Therefore, the increase in knowledge and information about children and their windows of susceptibility to environmental agents will help to identify subgroups and age sensitive to planning specific preventive actions.